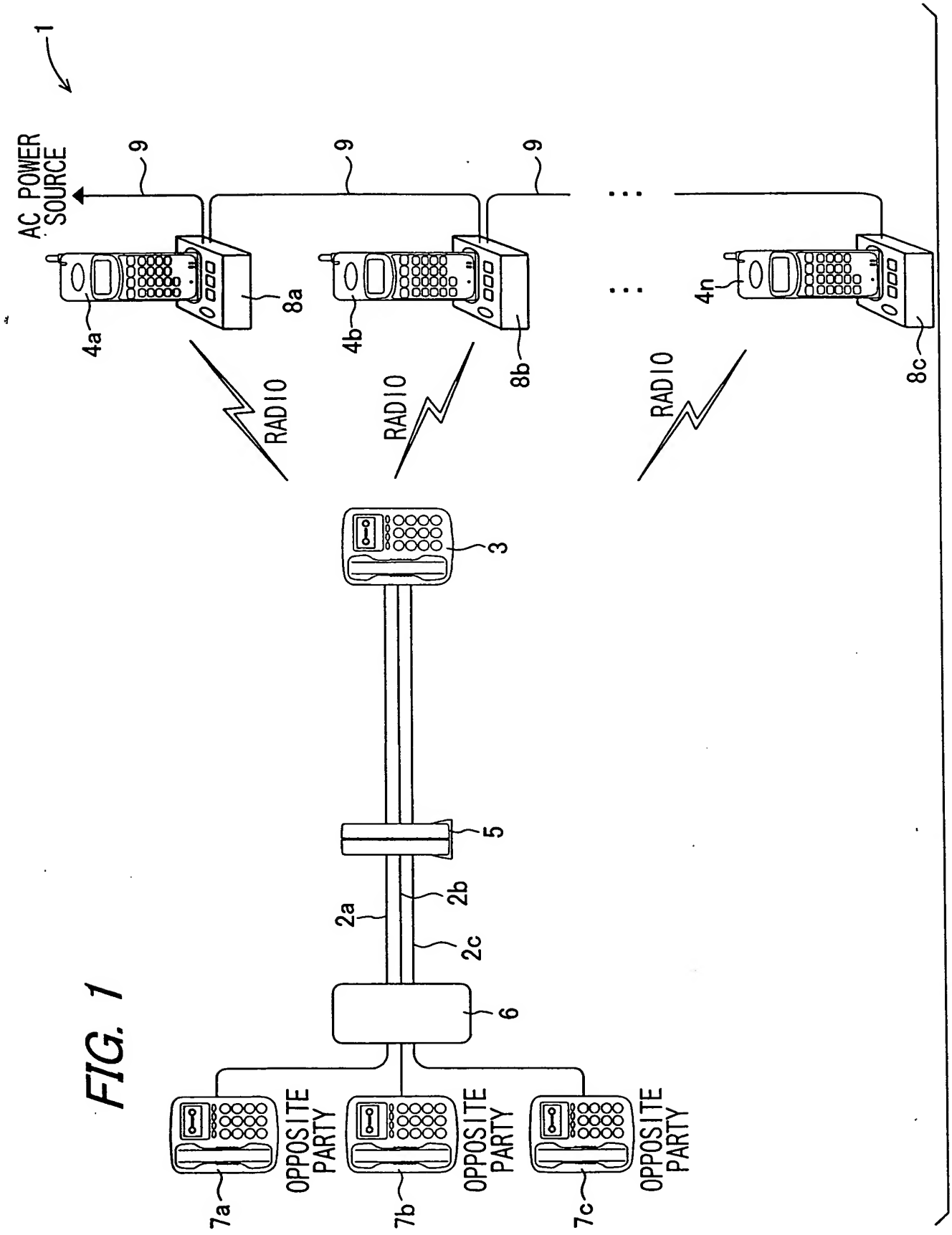

1
AC POWER SOURCE
9
9
9
4a
8a
4b
8b
4n
8c
RADIO
RADIO
RADIO
3
5
2a
2b
2c
6
7a
OPPOSITE PARTY
7b
OPPOSITE PARTY
7c
OPPOSITE PARTY

FIG. 1

FIG. 2

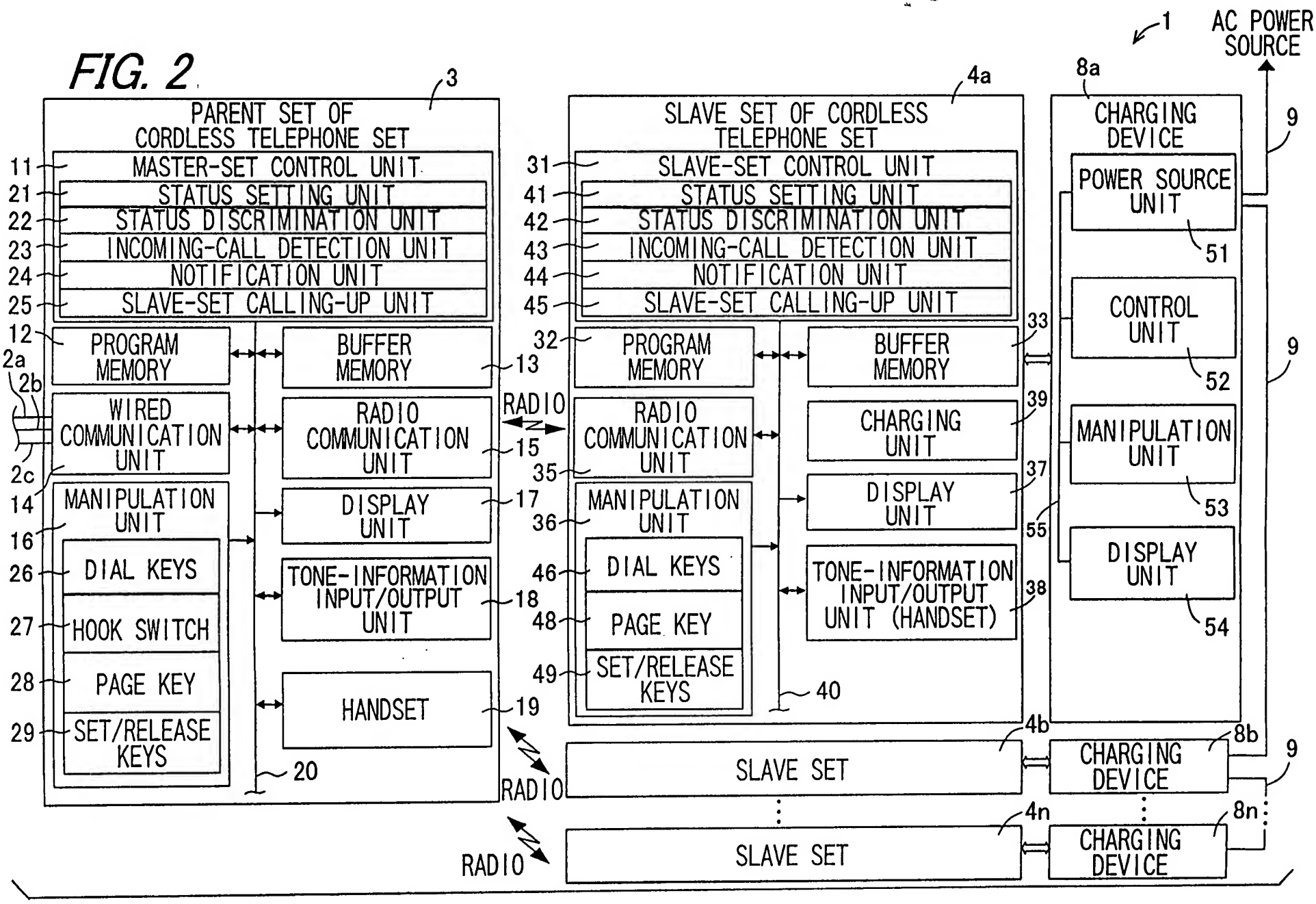

1
AC POWER SOURCE
3
PARENT SET OF CORDLESS TELEPHONE SET
11 MASTER-SET CONTROL UNIT
21 STATUS SETTING UNIT
22 STATUS DISCRIMINATION UNIT
23 INCOMING-CALL DETECTION UNIT
24 NOTIFICATION UNIT
25 SLAVE-SET CALLING-UP UNIT
12 PROGRAM MEMORY
BUFFER MEMORY 13
2a
2b
WIRED COMMUNICATION UNIT
2c
14
RADIO COMMUNICATION UNIT 15
MANIPULATION UNIT 16
DIAL KEYS 26
HOOK SWITCH 27
PAGE KEY 28
SET/RELEASE KEYS 29
DISPLAY UNIT 17
TONE-INFORMATION INPUT/OUTPUT UNIT 18
HANDSET 19
20
RADIO
4a
SLAVE SET OF CORDLESS TELEPHONE SET
31 SLAVE-SET CONTROL UNIT
41 STATUS SETTING UNIT
42 STATUS DISCRIMINATION UNIT
43 INCOMING-CALL DETECTION UNIT
44 NOTIFICATION UNIT
45 SLAVE-SET CALLING-UP UNIT
32 PROGRAM MEMORY
BUFFER MEMORY 33
RADIO COMMUNICATION UNIT 35
CHARGING UNIT 39
MANIPULATION UNIT 36
DISPLAY UNIT 37
DIAL KEYS 46
PAGE KEY 48
SET/RELEASE KEYS 49
TONE-INFORMATION INPUT/OUTPUT UNIT (HANDSET) 38
40
8a
CHARGING DEVICE
POWER SOURCE UNIT 51
CONTROL UNIT 52
MANIPULATION UNIT 53
DISPLAY UNIT 54
55
9
RADIO
4b
SLAVE SET
8b
CHARGING DEVICE
RADIO
4n
SLAVE SET
8n
CHARGING DEVICE

FIG. 3

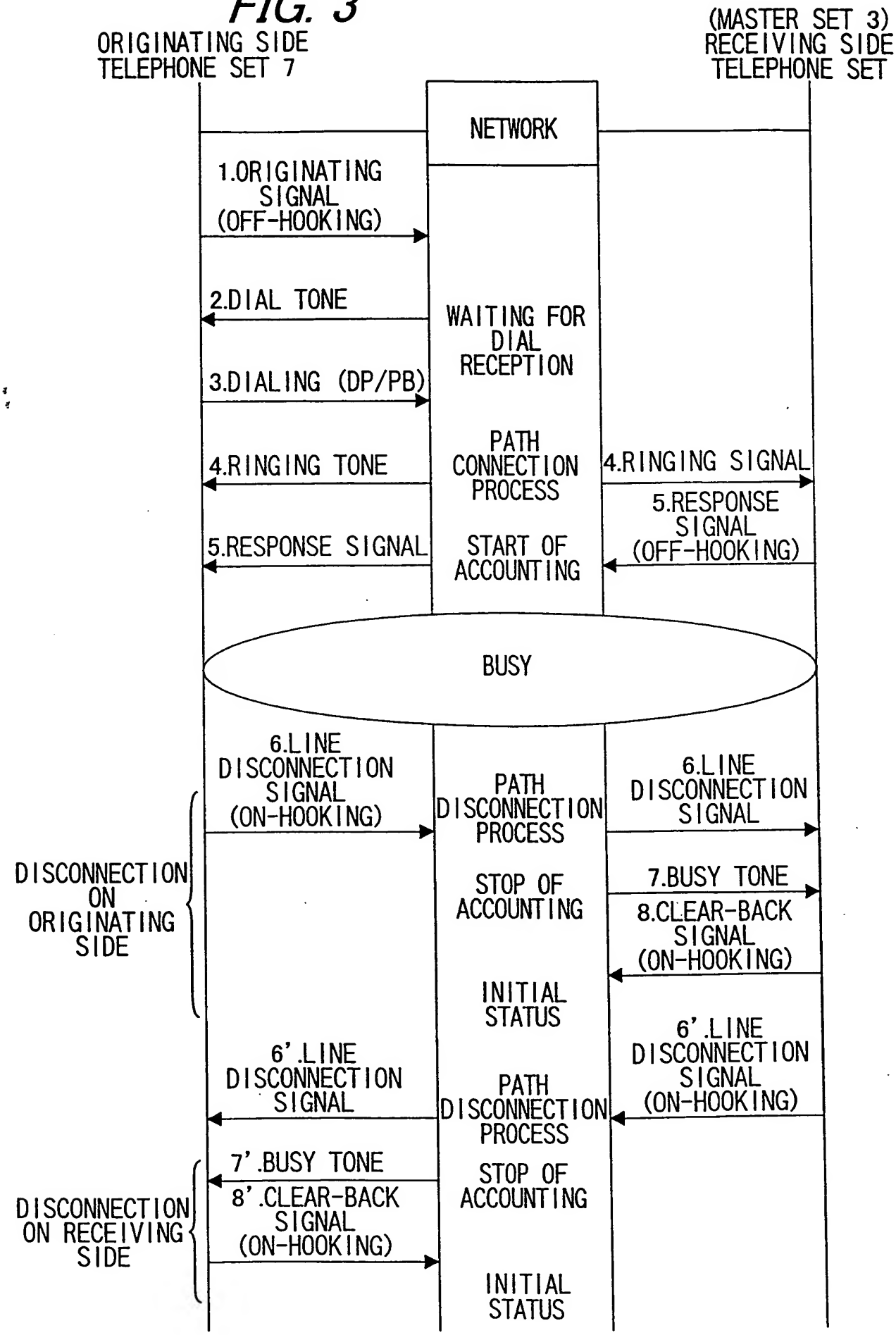

ORIGINATING SIDE TELEPHONE SET 7
NETWORK
(MASTER SET 3) RECEIVING SIDE TELEPHONE SET
1.ORIGINATING SIGNAL (OFF-HOOKING)
2.DIAL TONE
WAITING FOR DIAL RECEPTION
3.DIALING (DP/PB)
PATH CONNECTION PROCESS
4.RINGING TONE
4.RINGING SIGNAL
5.RESPONSE SIGNAL
5.RESPONSE SIGNAL (OFF-HOOKING)
START OF ACCOUNTING
BUSY
6.LINE DISCONNECTION SIGNAL (ON-HOOKING)
PATH DISCONNECTION PROCESS
6.LINE DISCONNECTION SIGNAL
DISCONNECTION ON ORIGINATING SIDE
7.BUSY TONE
STOP OF ACCOUNTING
8.CLEAR-BACK SIGNAL (ON-HOOKING)
INITIAL STATUS
6'.LINE DISCONNECTION SIGNAL
6'.LINE DISCONNECTION SIGNAL
PATH DISCONNECTION PROCESS
(ON-HOOKING)
7'.BUSY TONE
STOP OF ACCOUNTING
DISCONNECTION ON RECEIVING SIDE
8'.CLEAR-BACK SIGNAL (ON-HOOKING)
INITIAL STATUS

FIG. 4

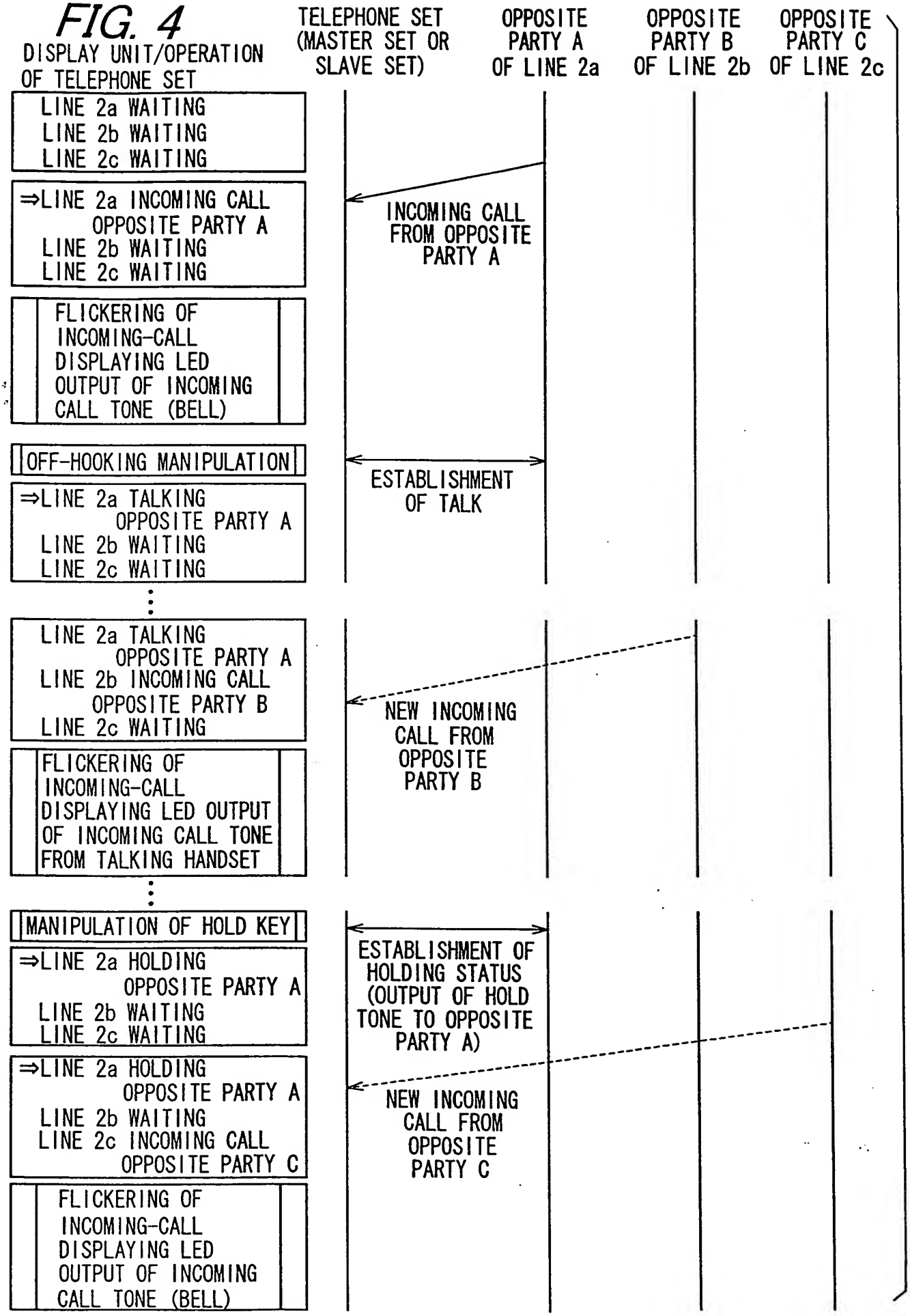

DISPLAY UNIT/OPERATION OF TELEPHONE SET
TELEPHONE SET (MASTER SET OR SLAVE SET)
OPPOSITE PARTY A OF LINE 2a
OPPOSITE PARTY B OF LINE 2b
OPPOSITE PARTY C OF LINE 2c
LINE 2a WAITING
LINE 2b WAITING
LINE 2c WAITING
⇒LINE 2a INCOMING CALL OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
INCOMING CALL FROM OPPOSITE PARTY A
FLICKERING OF INCOMING-CALL DISPLAYING LED
OUTPUT OF INCOMING CALL TONE (BELL)
OFF-HOOKING MANIPULATION
ESTABLISHMENT OF TALK
⇒LINE 2a TALKING OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
LINE 2a TALKING OPPOSITE PARTY A
LINE 2b INCOMING CALL OPPOSITE PARTY B
LINE 2c WAITING
NEW INCOMING CALL FROM OPPOSITE PARTY B
FLICKERING OF INCOMING-CALL DISPLAYING LED OUTPUT OF INCOMING CALL TONE FROM TALKING HANDSET
MANIPULATION OF HOLD KEY
ESTABLISHMENT OF HOLDING STATUS (OUTPUT OF HOLD TONE TO OPPOSITE PARTY A)
⇒LINE 2a HOLDING OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
⇒LINE 2a HOLDING OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c INCOMING CALL OPPOSITE PARTY C
NEW INCOMING CALL FROM OPPOSITE PARTY C
FLICKERING OF INCOMING-CALL DISPLAYING LED
OUTPUT OF INCOMING CALL TONE (BELL)

FIG. 5

STATUS OF TELEPHONE SET	INPUTTED SIGNAL (MANIPULATION OF TELEPHONE SET)	OPERATION OF TELEPHONE SET
WAITING STATUS (STATUS WHERE NO CALL HAS BEEN RECEIVED YET)	PAGE KEY SIGNAL	OUTPUT OF RINGING TONE (BELL)
	INCOMING CALL SIGNAL	DISPLAYS OF INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (BELL)
TALKING STATUS	PAGE KEY SIGNAL	TEMPORARY HOLDING OF TALK, OUTPUT OF RINGING TONE (BELL)
	NEW INCOMING-CALL SIGNAL	DISPLAYS OF INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (FROM HANDSET)
TALK HOLDING STATUS	PAGE KEY SIGNAL	OUTPUT OF RINGING TONE (BELL)
	NEW INCOMING-CALL SIGNAL	DISPLAYS OF NEW INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (BELL)

FIG. 6

STATE OF TELEPHONE SET	INPUTTED SIGNAL (MANIPULATION OF TELEPHONE SET)	OPERATION OF TELEPHONE SET
RINGING-TONE OUTPUT STATE IN WAITING STATUS	PAGE-RELEASE KEY SIGNAL	STOP OF RINGING TONE (BELL), RE-WAITING STATUS
	NEW INCOMING-CALL SIGNAL	STOP OF RINGING TONE (BELL), DISPLAYS OF INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (BELL), RE-WAITING STATUS
RINGING-TONE OUTPUT STATE IN TEMPORARY TALK HOLDING STATUS	PAGE-RELEASE KEY SIGNAL	STOP OF RINGING TONE (BELL), RE-TALKING STATUS
	NEW INCOMING-CALL SIGNAL	STOP OF RINGING TONE (BELL), DISPLAYS OF INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (FROM HANDSET), RE-TALKING STATUS
RINGING-TONE OUTPUT STATE IN TALK HOLDING STATUS	PAGE-RELEASE KEY SIGNAL	STOP OF RINGING TONE (BELL), RE-TALK-HOLDING STATUS
	NEW INCOMING-CALL SIGNAL	STOP OF RINGING TONE (BELL), DISPLAYS OF INCOMING CALL (SCREEN, LED), OUTPUT OF INCOMING CALL TONE (BELL), RE-TALK-HOLDING STATUS

FIG. 7

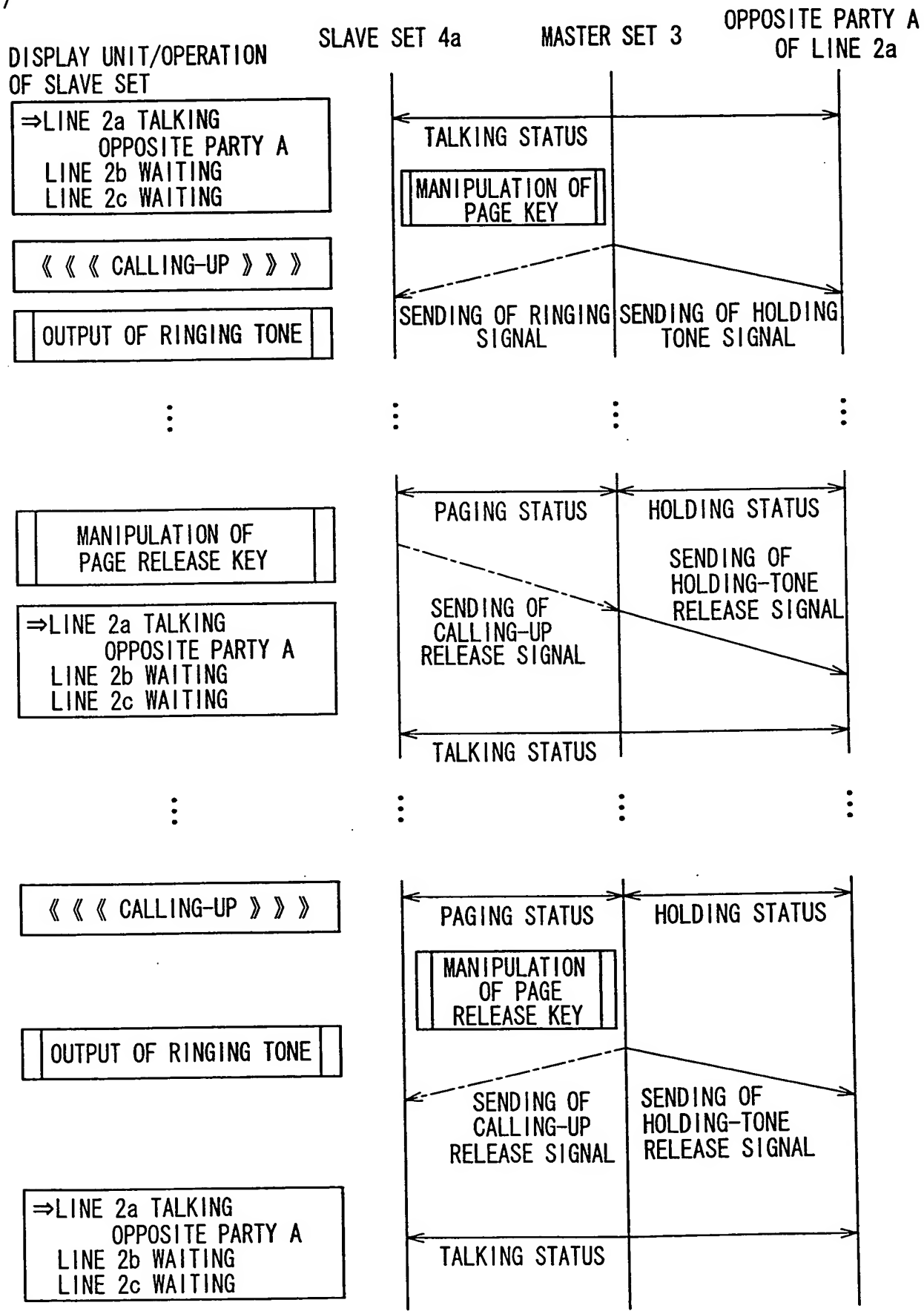

DISPLAY UNIT/OPERATION OF SLAVE SET
SLAVE SET 4a
MASTER SET 3
OPPOSITE PARTY A OF LINE 2a
⇒LINE 2a TALKING
OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
TALKING STATUS
MANIPULATION OF PAGE KEY
《《《 CALLING-UP 》》》
OUTPUT OF RINGING TONE
SENDING OF RINGING SIGNAL
SENDING OF HOLDING TONE SIGNAL
MANIPULATION OF PAGE RELEASE KEY
PAGING STATUS
HOLDING STATUS
SENDING OF HOLDING-TONE RELEASE SIGNAL
SENDING OF CALLING-UP RELEASE SIGNAL
⇒LINE 2a TALKING
OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
TALKING STATUS
《《《 CALLING-UP 》》》
PAGING STATUS
HOLDING STATUS
MANIPULATION OF PAGE RELEASE KEY
OUTPUT OF RINGING TONE
SENDING OF CALLING-UP RELEASE SIGNAL
SENDING OF HOLDING-TONE RELEASE SIGNAL
⇒LINE 2a TALKING
OPPOSITE PARTY A
LINE 2b WAITING
LINE 2c WAITING
TALKING STATUS

FIG. 8

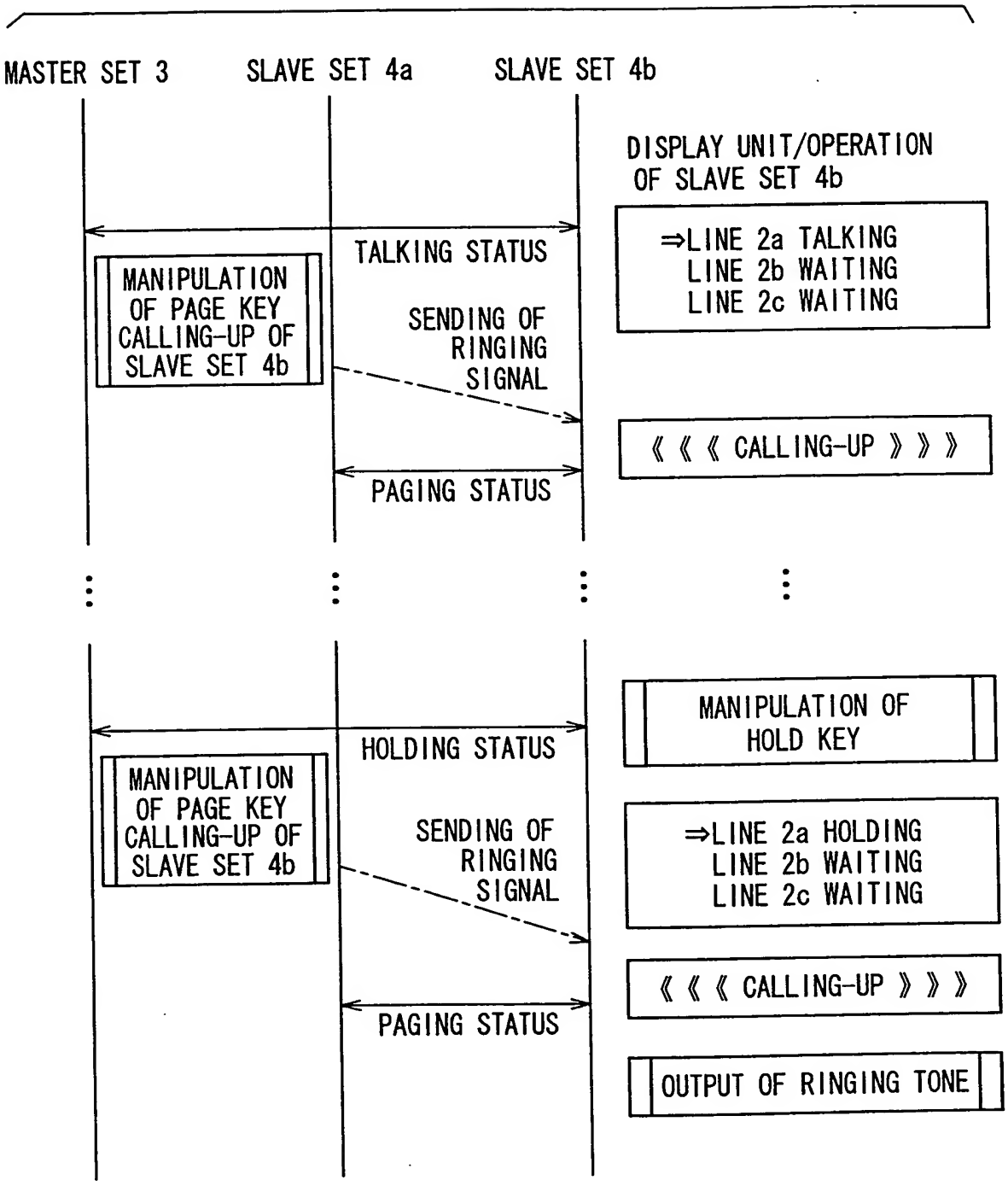
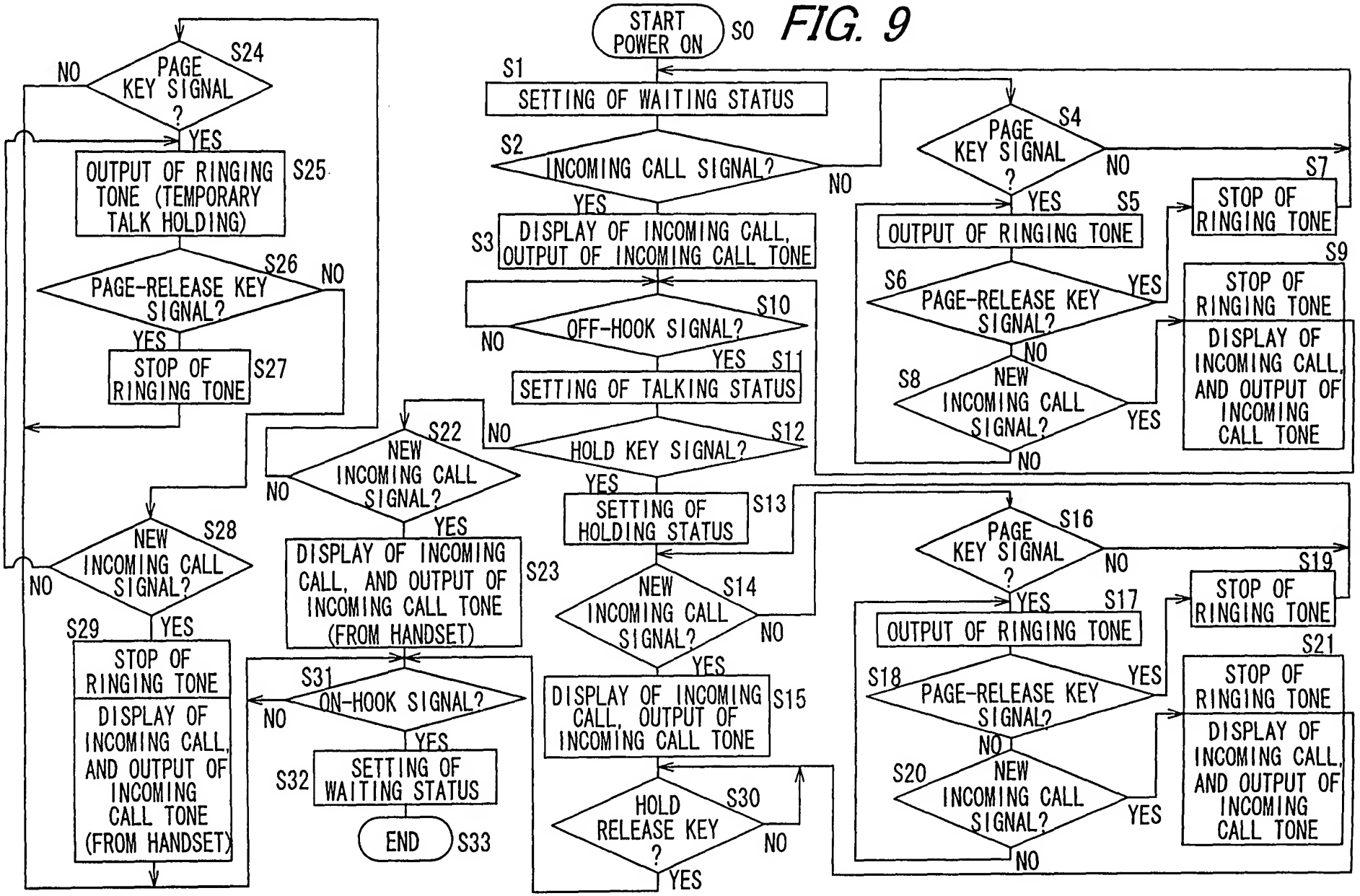

MASTER SET 3
SLAVE SET 4a
SLAVE SET 4b
DISPLAY UNIT/OPERATION OF SLAVE SET 4b
TALKING STATUS
⇒LINE 2a TALKING
LINE 2b WAITING
LINE 2c WAITING
MANIPULATION OF PAGE KEY CALLING-UP OF SLAVE SET 4b
SENDING OF RINGING SIGNAL
《《《 CALLING-UP 》》》
PAGING STATUS
MANIPULATION OF HOLD KEY
HOLDING STATUS
MANIPULATION OF PAGE KEY CALLING-UP OF SLAVE SET 4b
SENDING OF RINGING SIGNAL
⇒LINE 2a HOLDING
LINE 2b WAITING
LINE 2c WAITING
《《《 CALLING-UP 》》》
PAGING STATUS
OUTPUT OF RINGING TONE

FIG. 9


START POWER ON
S0
S1
SETTING OF WAITING STATUS
S2
INCOMING CALL SIGNAL?
NO
YES
S3
DISPLAY OF INCOMING CALL, OUTPUT OF INCOMING CALL TONE
S10
OFF-HOOK SIGNAL?
NO
YES
S11
SETTING OF TALKING STATUS
S12
HOLD KEY SIGNAL?
NO
YES
S13
SETTING OF HOLDING STATUS
S14
NEW INCOMING CALL SIGNAL?
NO
YES
S15
DISPLAY OF INCOMING CALL, OUTPUT OF INCOMING CALL TONE
S30
HOLD RELEASE KEY ?
NO
YES
S4
PAGE KEY SIGNAL ?
NO
YES
S5
OUTPUT OF RINGING TONE
S6
PAGE-RELEASE KEY SIGNAL?
YES
NO
S8
NEW INCOMING CALL SIGNAL?
YES
NO
S7
STOP OF RINGING TONE
S9
STOP OF RINGING TONE
DISPLAY OF INCOMING CALL, AND OUTPUT OF INCOMING CALL TONE
S16
PAGE KEY SIGNAL ?
NO
YES
S17
OUTPUT OF RINGING TONE
S18
PAGE-RELEASE KEY SIGNAL?
YES
NO
S20
NEW INCOMING CALL SIGNAL?
YES
NO
S19
STOP OF RINGING TONE
S21
STOP OF RINGING TONE
DISPLAY OF INCOMING CALL, AND OUTPUT OF INCOMING CALL TONE
S22
NEW INCOMING CALL SIGNAL?
NO
YES
S23
DISPLAY OF INCOMING CALL, AND OUTPUT OF INCOMING CALL TONE (FROM HANDSET)
S31
ON-HOOK SIGNAL?
NO
YES
S32
SETTING OF WAITING STATUS
END
S33
S24
PAGE KEY SIGNAL ?
NO
YES
S25
OUTPUT OF RINGING TONE (TEMPORARY TALK HOLDING)
S26
PAGE-RELEASE KEY SIGNAL?
NO
YES
S27
STOP OF RINGING TONE
S28
NEW INCOMING CALL SIGNAL?
NO
YES
S29
STOP OF RINGING TONE
DISPLAY OF INCOMING CALL, AND OUTPUT OF INCOMING CALL TONE (FROM HANDSET)